

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020874**Date Inspected:** 20-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspector: Mr. Bao Qian

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Niu Duojun, stencil 037932 used shielded metal arc welding procedure WPS-B-P-2214-TC-U5B-FCM to make OBG segment 14E weld SEG3019Z-007. This QA Inspector measured a welding current of approximately 160 amps and Mr. Niu Duojun appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Gengcheng, stencil 066418 used shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-FCM-Repair to make critical weld repair of ultrasonic rejections to OBG segment 14E weld SEG3019Z-014. ZPMC QC informed this QA Inspector that critical weld repair document B-CWR-2755 documents this weld repair. This QA Inspector measured a welding current of approximately 190 amps and Mr. Yang Gengcheng appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Mr. Li Yong Shui, stencil 067656 used shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-FCM-Repair to make critical weld repair of ultrasonic rejections to OBG segment 14E weld SEG3019Z-015. ZPMC QC informed this QA Inspector that critical weld repair document B-CWR-2755 documents this weld repair. This QA Inspector measured a welding current of approximately 185 amps and Mr. Li Yong Shui appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Yunfeng, stencil 215553 used shielded metal arc welding procedure WPS-B-P-2111-FCM to make OBG segment 14E weld SEG3019Y-055. This QA Inspector measured a welding current of approximately 200 amps and Mr. Yang Yunfeng appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wei Hengbin, stencil 068924 used shielded metal arc welding procedure specification WPS-B-P-2213-TC-U5B-FCM to make OBG segment 13AE weld SEG3007L-053. This QA Inspector observed a welding current of approximately 170 amps, the base materials appear to have been preheated with electric heating elements and Mr. Wei Hengbin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents. See the photograph below for additional information.

This QA Inspector observed ZPMC welder Mr. Du Hengyou, stencil 037743 used shielded metal arc welding procedure specification WPS-B-P-2213-TC-U5B-FCM to make OBG segment 13AE weld SEG3007L-069. This QA Inspector observed a welding current of approximately 165 amps, the base materials appear to have been preheated with electric heating elements and Mr. Du Hengyou appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Luo Xuanping, stencil 067610 used shielded metal arc welding procedure WPS-B-P-2114-FCM-1 to make OBG segment 13AE weld SEG3019BB-051. This QA Inspector observed a welding current of approximately 160 amps. This QA Inspector observed Mr. Luo Xuanping appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Huang Hongpei, stencil 037705 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 13AE welds SEG3007AT-021 and 022. This QA Inspector observed a welding current of approximately 240 amps and 27.5 volts elements and Mr. Huang Hongpei appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents. See the photograph below for additional information.

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Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

Inspected By: Dawson,Paul

Quality Assurance Inspector

Reviewed By: Riley,Ken

QA Reviewer